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Description of a new species, Loxostege ayhanana sp. n. from East Turkey (Lepidoptera, Pyraloidea)

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Abstract: Description of a new species, *Loxostege ayhanana* sp. n. from East Turkey (Lepidoptera, Pyraloidea). Cent. ent. Stud., Misc.Pap. 164: 1-4, 7 figs. This paper deals with the description of a new species, Loxostege ayhanana sp. n. from Van

Key words: Lepidoptera, Pyraloidea, Loxostege ayhanana, description, Turkey, Van Province.

Within the frame of the investigations on the Lepidoptera fauna of Van Province (East Turkey), the authors recorded an unknown Loxostege species from a locality, Darboğaz (upper Catak district, Van Province) in June of 2015. The single male was illustrated by the authors last year (Kemal & Koçak, 2016: 94, fig.67). Later, two males were captured in June 2016, from Bahçesaray and Çatak (Darboğaz) again. The authors drew attention to this species captured in the district Bahçesaray as "Loxostege sp." (Kemal & Koçak, 2017: 172, nr.372). Finally, after taking the wing markings and the male genitalia into consideration, the authors came to the conclusion that this species of *Loxostege* Hbn. is new to the science.

The genus Loxostege was established by Hübner in 1825. The genus is currently classified under the subfamily *Puraustinae* Meyrick, 1890. It is represented by 10 species in Turkey. These are together with their provincial records, as follows; aeruginalis Hbn.,1796 (Amasya, Bursa), bicoloralis W.Warren,1892 (Kahramanmaras, Sanhurfa), clathralis Hbn.,[1813] (7 provinces), mucosalis H.-S.,[1848] (Amasya, Ankara, Hakkari?, İstanbul, Kayseri, Kırıkkale), peltalis Ev.,1842 (Sivas), peltaloides Rbl.,1932 (Konya, Kahramanmaraş, Sivas, Van, Bayburt), sticticalis L.,1761 (13 provinces), turbidalis Tr.,1829 (Bursa), wagneri Zrny.,1929 (Ankara, Konya, Nevşehir, Van), and sp. n. (Van)2.

Loxostege Hübner,[1825]

Province (East Turkey).

Verz. bekannt. Schmett. Type-species: Pyralis aeruginalis Hübner,1796, by subsequent designation by Hampson in 1918.

Loxostege ayhanana sp.n. (Figs. 1-4)

 $\underline{http://zoobank.org/urn:lsid:zoobank.org:act:3E8F625D-0843-43E9-8141-494064BF06AD}$

<u>Description</u>: Holotype \emptyset . Antenna filiform. Upperside of head, thorax and abdomen dark brown. Ventral side, especially abdomen covered by pearly white scales.

Forewing: 14mm, wingspan: 28mm.

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Upperside of forewing: Ground colour cinnamon-brown. Markings slightly darker than ground colour. Darker discal spot distinct. Brown cell-spot hardly visible. Brown postdiscal oblique stria distinct. Brown submarginal band straight, darker at subapical area. Antemarginal pale cinnamon stria distinct. Margin dark brown, distinctly double-lined. Cilia dark brown, bi-coloured. Upperside of hindwing: Ground colour pale cinnamon, basal and postdiscal areas suffused with brown. Antemarginal pale cinnamon stria distinct. Margin dark brown, indistinctly double-lined. Cilia similar to that of forewing but paler towards tornus.

Underside of forewing: Ground colour pale cinnamon. Discal and cell spots brown and distinct. Darker markings at outer part of forewing distinct. Anal part with greenish tint, without markings. Underside of hindwing: Pale cinnamon, without markings. Only marginal stria brown, distinct.

Paratypes 2 \circlearrowleft . Forewing: 13.5-14mm, wingspan: 27-28mm. Wing coloration and markings as in holotype. Male genitalia (GP2483 \circlearrowleft): Uncus short, robust, round at apex with strong, dense and smooth hairs. Valva well developed, costal and anal margin almost paralel to each other, apex broad, round. Costa distinct. Fibula well-chitinized, bi-furcate at base, blunt apically. It makes an obtuse angle with posterior margin of valva. Fibular cavity well developed. Sacculus well-chitinized, roundish. Juxta as an arrowhead at base. Saccus developed. Aedeagus tubular, well-chitinized. Apex blunt, concave, irregularly serrate. Inside, a subterminally placed, well-reticulated structure exists. Cornutus invisible.

Tympanal organ is illustrated below (Figs. 3, 4).

Female: Unknown.

Material studied: Holotype \circlearrowleft . East Turkey, Van Pr. Çatak, Darboğaz 2050m (65Dg), 8 6 2015; Paratypes: 1 \circlearrowleft from same place, 2030m, 30 6 2016; 1 \circlearrowleft from Bahçesaray, Upper Mukus valley 1840m (65Am4), 23 6 2016, M. Kemal & A. Koçak leg. All the nocturnal specimens were collected by light trap (PAIT)³. Biorepository: CESA, http://grbio.org/cool/eaaz-xyfc

<u>Flight</u>: June, nocturnal, in a single generation. <u>Presence</u>: Very rare. <u>Vertical distribution</u>: Between 1840-2050m.

Bionomy: Unknown.

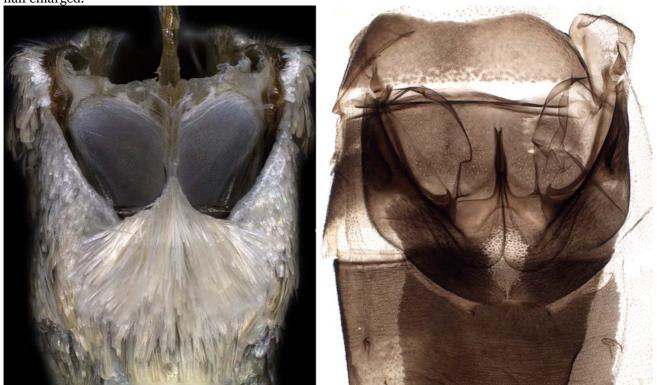


Fig. 1 − *Loxostege ayhanana* sp. n. (Holotype, ♂). Upperside. East Turkey, Van Pr. Çatak, Darboğaz 2050m (65Dg), 8 6 2015. M. Kemal (Cesa)

³ https://archive.org/details/ASimpleButEffectiveLightTrapForInsectsPaitByTheCesa



Fig. 2 - Male genitalia of *Loxostege ayhanana* sp. n. (Paratype) (GP2483). Aedeagus removed, its terminal half enlarged.



Figs. 3, 4 - Male tympanal organ of *Loxostege ayhanana* sp. n. (Paratype) (GP2483). Before preparation (left), after preparation (right).

Etymology: The scientific name of this new species is dedicated to Mrs. Ayhan Turdi (1882-1942), nickname "Ayhan Ana". She was born in a wealthy and educated family in Kuldja (Uighur A.R.). Her father provided Ayhan's training in one of the innovative school. This educational opportunity has ben influential in her growing up as one of the contemporary intellectual thinkers. After her father, she lost her mother and her beloved partner in a row, never married again. She has opened up a 16-room house for orphans as a boarding school for all their expenses. This school was known as "Hayriye Mektebi" [Beneficial School] at that time and "Ayhan Ana [mother] School", which is known as Ayhan Ana name among the public day by day (Fig. 5). This school,

which has undertaken important tasks in educational services, has been a science nest for tens of thousands of children and still works actively (**Figs. 6**, **7**) (Kemal Yunusoğlu, 2015).

Acknowledgement

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Fig. 5– Ayhan Ana's bust in Kuldja city, Kazanchi district. Below, Ayhan Ana's name is written in Uighur language and Chinese, as "Ayhan Ana", and "*A yi han mu qin*" [transcribed] means Ayhan Ana.



Figs. 6, 7 – Ayhan Ana's students in the classroom at the present time (photos: Teacher Yultuz Emin).

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⁴ http://www.cesa-tr.org/Pri.htm

⁵ http://www.cesa-tr.org/Miscell.htm

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